



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,613	06/20/2006	Karl Schmidt	NAESENS 201-KFM	6055
10037	7590	01/09/2008	EXAMINER	
MILDE & HOFFBERG, LLP 10 BANK STREET SUITE 460 WHITE PLAINS, NY 10606			MOK, ALEX W	
		ART UNIT	PAPER NUMBER	
				2834
		MAIL DATE	DELIVERY MODE	
		01/09/2008	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/583,613	SCHMIDT ET AL.
	Examiner	Art Unit
	Alex W. Mok	2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 20 June 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-23 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-23 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 20 June 2006 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 - Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/11/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to because in figure 5, the reference numerals are not shown for the jacket and the output shaft (numerals 11 and 2). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taiani (US Patent No.: 4896064), and further in view of Fehr et al. (US Patent No.: 4146805).

For claim 1, Taiani teaches a magnetic coupling arrangement wherein at least one magnet arrangement (reference numerals 48, 50, figure 3) is assigned to each of the input shaft and to the output shaft (reference numerals 22, 28), and wherein a containment shell (reference numeral 40, figure 2) comprising at least one inner sleeve and at least one outer sleeve extends between the magnet arrangements (see figure 2). Taiani does not specifically teach the improvement wherein the inner sleeve is formed from a profile element which extends in a manner of a coil.

Fehr et al. however teach a magnetic drive wherein a wall (i.e. profile element) between two magnet arrangements has grooves arranged in a helical manner (see column 2, lines 33-41).

It would have been obvious to have this arrangement for the profile element, and also to axially fasten the profile element using the outer sleeve, since the arrangement of having the profile element in the manner of a coil, as in a helical manner, is already known in the art, as shown by Fehr et al., and a person of ordinary skill in the art would have been able to include this configuration for the purpose of reducing the manufacturing costs and maintenance costs of the coupling arrangement.

For claim 2, it would have been obvious to have a groove on a first side of the profile element and a protrusion at its second side, since this would involve a mere change in the shape of the profile element, which is recognized as being within the level of ordinary skill in the art, and also a person of ordinary skill would have been able to include this for the purpose of better engaging the windings of the profile element.

For claim 3, Taiani discloses a sealing material provided on a side of the profile element (see column 5, lines 32-37).

For claim 4, it would have been obvious to have sealing tape as the sealing material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

For claim 5, Taiani exhibits a cylindrical jacket with a circular bottom (see figure 2).

For claims 6 and 7, Taiani exhibits slots (or notches as claim 7) on the jacket in the longitudinal direction (reference numeral 42).

For claim 8, since Taiani already discloses notches as explained for claim 7, it would have been obvious to make several notches in succession, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

For claims 9 and 10, it would have been obvious to provide both holes for the notches in the jacket and also have perforations for the jacket, since forming holes in a component is well known in the art as exhibited by Taiani (see figure 8), and also this would involve a mere change in the shape of the components, which is recognized as being within the level of ordinary skill in the art.

For claim 11, since Taiani already discloses a sealing as explained for claim 3, it would have been obvious to provide the sealing on either the outer or the inner side, since this would involve a mere change in the location of a component, and it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

For claim 12, it would have been obvious to include a support ring in the circumferential direction of the jacket, since Taiani discloses a washer (column 6, lines 1-16), i.e. support ring, to separate the laminations on the barrier, i.e. jacket, and a person of ordinary skill would have been able to include this configuration for the purpose of creating sections on the jacket.

For claim 13, it would have been obvious to have the windings compressed so that the profile element can be axially fastened at a flange, since Taiani discloses a flange (column 6, line 37), and that the laminations are tightly clamped together (column

6, lines 57-64), i.e. windings being compressed, which would ensure the fastening of the profile element in the axial direction.

For claim 14, Taiani discloses a spring (reference numeral 104, figure 4C), i.e. spring loaded connection between the inner and outer sleeve.

For claim 15, since Taiani discloses the spring as explained in claim 14 above, it would have been obvious to have the spring element between the inner and outer sleeve for the purpose of axially fastening the profile element.

For claim 16, it would have been obvious to have the bottom of the inner sleeve fastened to the last winding of the profile element, since rearranging parts of an invention involves only routine skill in the art, and a person of ordinary skill would have included this for the purpose of axially fixing the profile element.

For claim 17, Taiani discloses an outer magnet arrangement fastened to the input shaft (see figures 1A, 3).

For claim 18, Taiani discloses an inner magnet arrangement fastened to the output shaft (see figures 1A, 3).

For claim 19, Taiani illustrates magnet rings exhibiting alternating polarity in the radial direction (figures 1A, 3).

For claims 20 and 21, it would have been obvious to have magnet rings with the same polarity arranged in the longitudinal direction and also several groups with differing polarity in the longitudinal direction, since this would involve changing the location of the magnets, i.e. rearranging parts of the invention, the same reason as the location of the sealing of claim 11.

For claims 22 and 23, it would have been obvious to have the gaps between the magnets be assigned to a support ring, and also to have the magnets arranged on the inner and outer sleeves such that the magnets with different polarity are located opposite to one another, since rearranging the magnets and the gaps would involve only routine skill in the art as explained for the location of the magnets of claims 20 and 21 above.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alex W. Mok whose telephone number is (571) 272-9084. The examiner can normally be reached on 7:30-5:00 Eastern Time, 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren E. Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Alex W. Mok
Examiner
Art Unit 2834

AM

